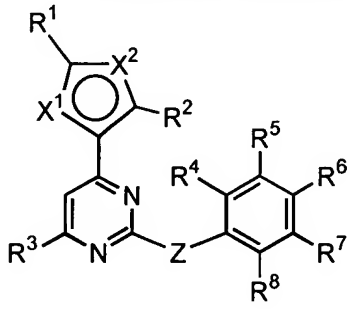
Remarks begin on page 16 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A compound of general formula I:



I

wherein:

X^1 is CR^9;

X^2 is NR^{10};

Z is NH;

R^1, R^2, R^3, R^9 and R^{10} are independently H, alkyl, aryl, aralkyl, heterocycle, halogeno, NO_2, CN, OH, alkoxy, aryloxy, (R''')nNH$_2$, (R''')nNH-R', (R''')nN-(R')(R''), NH-aryl, N-(aryl)$_2$, COOH, COO-R', COO-aryl, CONH$_2$, CONH-R', CON-(R')(R''), CONH-aryl, CON-(aryl)$_2$, SO_3H, SO_2NH_2, CF_3, CO-R', or CO-aryl, wherein alkyl, aryl, aralkyl and heterocycle groups may be further substituted with one or more groups selected from halogeno, NO_2, CN, OH, O-methyl, NH_2, COOH, CONH$_2$ and CF_3;

R^4, R^5, R^7, and R^8 are independently from each other H, substituted or unsubstituted lower alkyl, halogeno, NO_2, CN, OH, substituted or unsubstituted alkoxy, NH_2, NH-R', N-(R')(R''), COOH, COO-R', CONH$_2$, CONH-R', CON-(R')(R''), SO_3H, SO_2NH_2, or CF_3;

R^6 is H, substituted or unsubstituted lower alkyl, halogeno, NO_2, CN, OH, substituted or unsubstituted alkoxy, NH_2, NH-R', N-(R')(R''), COOH, COO-R', SO_3H, SO_2NH_2, or CF_3;

wherein R' R'' and R''' are each independently alkyl groups that may be the same or different and n is 0 or 1; and wherein at least two or three of R^1, R^2 and R^9 are not hydrogen; or a pharmaceutically acceptable salts thereof.

2. (Currently Amended) A compound according to claim 1, wherein;

- R^1, R^2, R^3 and R^9 are each independently selected from H, alkyl, aryl, aralkyl, heterocycle, halogeno, NO_2, CN, OH, alkoxy, aryloxy, (R''')nNH_2, (R''')nNH-R', (R''')nN-(R')(R''), COOH, COO-R', $CONH_2$, CONH-R', CON-(R')(R''), SO_3H, SO_2NH_2, CF_3, and CO-R' wherein alkyl, aryl and aralkyl groups may be further substituted with one or more groups selected from halogeno, NO_2, CN, OH, O-methyl, NH_2, COOH, $CONH_2$ and CF_3

~~- R^4-R^8 are each independently selected from H, halogeno, nitro, amino, aminoalkyl, hydroxy, alkoxy, carbamoyl, sulfamyl, N(R')(R''), C_{1-4} alkyl and substituted C_{1-4} alkyl.~~

3. (Previously Presented) A compound according to claim 1 or 39, wherein R^3 is H.

4. (Original) A compound according to claim 3, wherein R^1, R^2 and R^9 are each independently H, halogeno, CN, NO_2, $CO(NH_2)$, (R''')NH(R')(R'') a C_{1-4} alkyl group or a heterocyclic group.

5. (Original) A compound according to claim 4, wherein when R^1 is halogeno, it is selected from chloro or bromo; when R^1 is alkylamino, it is diethylaminomethyl or dimethylaminomethyl; when R^1 is a heterocyclic group it is morpholin-4-ylmethyl or 4-methyl-piperazin-1-ylmethyl.

6. (Previously Presented) A compound according to claim 1 or 39, wherein R^1 is H or CN, and R^2 and R^9 are both methyl.

7. (Original) A compound according to claim 6, wherein R^1 is H.

8. (Original) A compound according to claim 7, wherein R^1 is CN.

9. (Previously Presented) A compound according to claim 1 or 39, wherein;
R^4, R^5, R^6, R^7, and R^8 are independently from each other H, unsubstituted lower alkyl, halogeno, NO_2, CN, OH, N-(R')(R''), or CF_3;
wherein R' R'' and R''' are each independently alkyl groups that may be the same or different and n is 0 or 1;

10. (Original) A compound according to claim 9, wherein R^4 to R^8 are selected independently from H, F, NH_2, NO_2, OH, Cl, Br, I, CN, CH_2OH, CF_3 and dimethylamino.

11. (Previously Presented) A compound according to claim 9, wherein R^4 and R^8 are both hydrogen.

12. (Original) A compound according to claim 1, wherein said compound is selected from 2-[N-(phenyl)]-4-(2,4-dimethylpyrrol-3-yl)pyrimidineamines in which the phenyl group is 2-, 3-, 4-or 5-substituted by at least one of F, NH_2, NO_2, OH, Cl, Br, I, CN, CH_2OH, CF_3 or OMe.

13. (Original) A compound according to claim 12, wherein the phenyl group is mono-substituted by F, NH_2, NO_2, OH, Cl, Br, I, CH_2OH, CN, CF_3 or OMe at any of the 2,3, 4 or 5-positions, or di-substituted by 2,4-difluoro, 3,5-difluoro, 3,4-difluoro, 2,4-dichloro, 3,5-dichloro, 3,4-dichloro or 4-chloro-3-trifluoromethyl.

14. (Original) A compound according to claim 1, wherein said compound is selected from 2-[N-(phenyl)]-4-(3,5-dimethyl-1H-pyrrole-2-carbonitrile)pyrimidineamines in which the phenyl group is 2-, 3- or 4-substituted by at least one of F, $NH(CH_3)_2$, NO_2, OH, Cl, Br, I or CF_3.

15. (Original) A compound according to claim 14, wherein the phenyl group is mono-substituted by F, $NH(CH_3)_2$, NO_2, OH, I or CF_3 at any of the 3 or 4-positions, or di-substituted by 4-methyl-3-nitro, 3-iodo-4-methyl, 4-chloro-3-methyl, 3-hydroxy-4-methyl, 4-fluoro-3-methyl or 4-methyl-3-fluoro.

16. (Original) A compound according to claim 1, wherein said compound is selected from 2-[N-(phenyl)]-4-(2,4-dimethyl-5-nitro-1H-pyrrol-3-yl)-pyrimidinamines wherein the phenyl group is mono-substituted by F, $NH(CH_3)_2$, NO_2, OH, I or CF_3 at the 4-position.

17. (Original) A compound according to claim 16, wherein the phenyl group is substituted by a fluoro or $NH(CH_3)_2$ group.

18. (Original) A compound according to claim 1, wherein said compound is selected from 2-[N-(phenyl)]-4-(2,4-dimethyl-5-halogeno-1H-pyrrol-3-yl)-pyrimidinamines wherein the phenyl group is mono-substituted by F, $NH(CH_3)_2$, NO_2, OH, I or CF_3 at the 3 or 4-positions.

19. (Original) A compound according to claim 18, wherein the phenyl group is substituted by a 4-fluoro or 3-nitro group, the halogeno group being chloro or bromo.

20. (Original) A compound according to claim 1, selected from 2-[N-(phenyl)]-4-(2,4-dimethyl-5-dialkylaminoalkyl-1H-pyrrol-3-yl)-pyrimidinamines wherein the phenyl group is mono-substituted by F, $NH(CH_3)_2$, NO_2, OH, I or CF_3 at the 4-position.

21. (Previously Presented) A compound according to claim 20, wherein the phenyl group is substituted by fluoro, and the dialkylaminoalkyl group is diethylaminomethyl or dimethylaminomethyl.

22. (Previously Presented) A compound according to claim 1, selected from 2-[N-(phenyl)]-4-(2,4-dimethyl-5-(heterocycle)-1H-pyrrol-3-yl)-pyrimidinamines wherein the phenyl group is mono-substituted by F, $NH(CH_3)_2$, NO_2, OH, I or CF_3 at the 4-position.

23. (Previously Presented) A compound according to claim 22, wherein the phenyl group is substituted by fluoro, and the heterocycle group is 5-morpholin-4-ylmethyl or 4-methyl-piperazin-1-ylmethyl.

24. (Previously Presented) A compound selected from:
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(3-nitro-phenyl)-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-iodo-phenyl)-amine;

(3,4-Difluoro-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
(4-Chloro-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
(3,5-Difluoro-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
4-[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-ylamino]-phenol;
3-[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-ylamino]-phenol;
(2,4-Difluoro-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
(2,4-Dichloro-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine ;
(4-Chloro-3-trifluoromethyl-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-trifluoromethyl-phenyl)-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(3-trifluoromethyl-phenyl)-amine;
(3-Chloro-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
N-[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-N',N'-dimethyl-benzene-1,4-diamine;
(3-Chloro-4-iodo-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(3-fluoro-4-iodo-phenyl)-amine;
3,5-Dimethyl-4-[2-(3-nitro-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Hydroxy-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
3,5-Dimethyl-4-[2-(4-trifluoromethyl-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(4-Iodo-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(3-Hydroxy-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
3,5-Dimethyl-4-[2-(4-methyl-3-nitro-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(3-Iodo-4-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Chloro-3-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(3-Hydroxy-4-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-3-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(3-Fluoro-4-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;

4-[2-(4-Dimethylamino-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carboxylic acid amide;
[4-(3,5-Dimethyl-1H-pyrrol-2-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
(4-Fluoro-phenyl)-[4-(1,2,4-trimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
[4-(2,4-Dimethyl-5-nitro-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
N-[4-(2,4-Dimethyl-5-nitro-1H-pyrrol-3-yl)-pyrimidin-2-yl]-N',N'-dimethyl-benzene-1,4-diamine;
[4-(5-Amino-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(5-Bromo-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(5-Bromo-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(3-nitro-phenyl)-amine;
[4-(5-Chloro-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(5-Diethylaminomethyl-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(5-Dimethylaminomethyl-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(2,4-Dimethyl-5-morpholin-4-ylmethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine; and
{4-[2,4-Dimethyl-5-(4-methyl-piperazin-1-ylmethyl)-1H-pyrrol-3-yl]-pyrimidin-2-yl}-(4-fluoro-phenyl)-amine.

25. (Original) A compound according to claim 24 selected from;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(3-nitro-phenyl)-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-iodo-phenyl)-amine;
(3,4-Difluoro-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
(4-Chloro-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
(3,5-Difluoro-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
4-[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-ylamino]-phenol;
3-[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-ylamino]-phenol;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-trifluoromethyl-phenyl)-amine;
(3-Chloro-4-iodo-phenyl)-[4-(2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(3-fluoro-4-iodo-phenyl)-amine;
3,5-Dimethyl-4-[2-(3-nitro-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;

4-[2-(4-Hydroxy-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
3,5-Dimethyl-4-[2-(4-trifluoromethyl-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(4-Iodo-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(3-Hydroxy-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
3,5-Dimethyl-4-[2-(4-methyl-3-nitro-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(3-Iodo-4-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Chloro-3-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(3-Hydroxy-4-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-3-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(3-Fluoro-4-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Dimethylamino-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carboxylic acid amide;
(4-Fluoro-phenyl)-[4-(1,2,4-trimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-amine;
[4-(2,4-Dimethyl-5-nitro-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
N-[4-(2,4-Dimethyl-5-nitro-1H-pyrrol-3-yl)-pyrimidin-2-yl]-N',N'-dimethyl-benzene-1,4-diamine;
[4-(5-Bromo-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(5-Bromo-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(3-nitro-phenyl)-amine;
[4-(5-Chloro-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(5-Diethylaminomethyl-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(5-Dimethylaminomethyl-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(2,4-Dimethyl-5-morpholin-4-ylmethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine, and
{4-[2,4-Dimethyl-5-(4-methyl-piperazin-1-ylmethyl)-1H-pyrrol-3-yl]-pyrimidin-2-yl}-(4-fluoro-phenyl)-amine.

26. (Original) A compound according to claim 25 selected from;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(3-nitro-phenyl)-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-iodo-phenyl)-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-trifluoromethyl-phenyl)-amine;
3,5-Dimethyl-4-[2-(3-nitro-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Hydroxy-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
3,5-Dimethyl-4-[2-(4-trifluoromethyl-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(4-Iodo-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(3-Hydroxy-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
3,5-Dimethyl-4-[2-(4-methyl-3-nitro-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(3-Iodo-4-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Chloro-3-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(3-Hydroxy-4-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-3-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(3-Fluoro-4-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Dimethylamino-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carboxylic acid amide;
[4-(2,4-Dimethyl-5-nitro-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
N-[4-(2,4-Dimethyl-5-nitro-1H-pyrrol-3-yl)-pyrimidin-2-yl]-N',N'-dimethyl-benzene-1,4-diamine;
[4-(5-Bromo-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(5-Bromo-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(3-nitro-phenyl)-amine;
[4-(5-Chloro-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;

[4-(5-Diethylaminomethyl-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine;
[4-(5-Dimethylaminomethyl-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine, and
[4-(2,4-Dimethyl-5-morpholin-4-ylmethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine.

27. (Original) A compound according to claim 26 selected from;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(3-nitro-phenyl)-amine;
[4-(2,4-Dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-iodo-phenyl)-amine;
3,5-Dimethyl-4-[2-(3-nitro-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Hydroxy-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
3,5-Dimethyl-4-[2-(4-trifluoromethyl-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(4-Iodo-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(3-Hydroxy-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
3,5-Dimethyl-4-[2-(4-methyl-3-nitro-phenylamino)-pyrimidin-4-yl]-1H-pyrrole-2-carbonitrile;
4-[2-(3-Hydroxy-4-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-3-methyl-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carbonitrile;
4-[2-(4-Fluoro-phenylamino)-pyrimidin-4-yl]-3,5-dimethyl-1H-pyrrole-2-carboxylic acid amide;
[4-(2,4-Dimethyl-5-nitro-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine; [4-(5-Bromo-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(3-nitro-phenyl)-amine, and
[4-(5-Dimethylaminomethyl-2,4-dimethyl-1H-pyrrol-3-yl)-pyrimidin-2-yl]-(4-fluoro-phenyl)-amine.

28. (Previously Presented) A compound according to claim 39, wherein;
- X^1 and X^2 are NH and CR^9 respectively;

- R^1, R^2, R^3 and R^9 are each independently selected from H, alkyl, aryl, aralkyl, heterocycle, halogeno, NO_2, CN, OH, alkoxy, aryloxy, (R''')nNH$_2$, (R''')nNH-R', (R''')nN-(R')(R''), COOH, COO-R', CONH$_2$, CONH-R', CON-(R')(R''), SO_3H,

SO_2NH_2, CF_3, and CO-R' wherein alkyl, aryl and aralkyl groups may be further substituted with one or more groups selected from halogeno, NO_2, CN, OH, O-methyl, NH_2, COOH, $CONH_2$ and CF_3;

- Z is selected from $NHSO_2$ and $NHCH_2$;

- R^4, R^5 and R^8 are each independently selected from H, halogeno, nitro, amino, aminoalkyl, hydroxy, alkoxy, carbamoyl, sulfamyl, N(R')(R''), C_{1-4} alkyl and substituted C_{1-4} alkyl;
- R6 is selected from H, halogeno, nitro, amino, aminoalkyl, hydroxy, alkoxy, carbamoyl, sulfamyl, N(R')(R''), methyl, propyl, butyl and substituted C_{1-4} alkyl;
- R7 is selected from H, halogeno, nitro, amino, aminoalkyl, hydroxy, carbamoyl, sulfamyl, N(R')(R'' C_{2-4} alkyl and substituted C_{1-4} alkyl.

29. (Original) A pharmaceutical composition comprising a compound of claim 1 or a pharmaceutically acceptable salt thereof together with a pharmaceutically acceptable excipient.

Claims 30-34 (Cancelled).

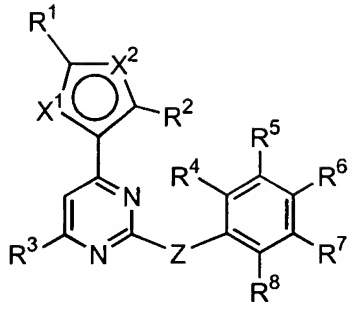
35. (Previously Presented) A method of treating a subject for a CDK dependent proliferative disorder, comprising administering to a subject a compound of claim 1 or a pharmaceutically acceptable salt thereof, such that said CDK dependent proliferative disorder in said subject is treated.

36. (Original) The method of claim 35, wherein the proliferative disorder is cancer or leukaemia.

37. (Original) The method of claim 35, wherein said compound is administered in an amount sufficient to inhibit at least one CDK enzyme.

38. (Previously Presented) The method of claim 37, wherein the CDK enzyme is CDK2 and/or CDK4.

39. (Currently Amended) A compound of general formula I:



I

wherein:

one of X^1 and X^2 is NR^{10} and the other of X^1 and X^2 is CR^9;

Z is NHCO, $NHSO_2$, $NHCH_2$, CH_2, CH_2CH_2, or CH=CH;

R^1, R^2, R^3 R^9 and R^{10} are independently H, alkyl, aryl, aralkyl, heterocycle, halogeno, NO_2, CN, OH, alkoxy, aryloxy, (R''')nNH$_2$, (R''')$_n$NH-R', (R''')$_n$N-(R')(R''), NH-aryl, N-(aryl)$_2$, COOH, COO-R', COO-aryl, $CONH_2$, CONH-R', CON-(R')(R''), CONH-aryl, CON-(aryl)$_2$, SO_3H, SO_2NH_2, CF_3, CO-R', or CO-aryl, wherein alkyl, aryl, aralkyl and heterocycle groups may be further substituted with one or more groups selected from halogeno, NO_2, CN, OH, O-methyl, NH_2, COOH, $CONH_2$ and CF_3;

R^4, R^5, R^6, R^7, and R^8 are independently from each other H, substituted or unsubstituted lower alkyl, halogeno, NO_2, CN, OH, substituted or unsubstituted alkoxy, NH_2, NH-R', N-(R')(R''), COOH, COO-R', $CONH_2$, CONH-R', CON-(R')(R''), SO_3H, SO_2NH_2, or CF_3;

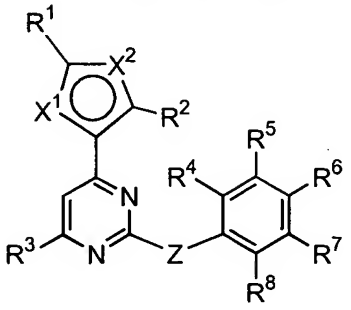
wherein R' R'' and R''' are each independently alkyl groups that may be the same or different and n is 0 or 1;

~~with the proviso that when R^1 and R^2 are H, X^1 is NH, X^2 is CH, and R^3 is H, the phenyl group is not~~

~~unsubstituted phenyl,~~
~~4-ethyl phenyl,~~
~~3-methyl phenyl,~~
~~3-(1,1,2,2-tetrafluoroethoxy) phenyl,~~
~~3,4,5-trimethoxy phenyl,~~

or a pharmaceutically acceptable salt thereof.

40. (Currently Amended) A compound of general formula I:



I

wherein:

X^1 is NH;

X^2 is CR^9;

Z is NH;

R^1, R^2, R^3 and R^9 are each independently selected from H, alkyl, aryl, aralkyl, heterocycle, halogeno, NO_2, CN, OH, alkoxy, aryloxy, $(R''')_nNH_2$, $(R''')_nNH$-R', $(R''')_nN$-(R')(R''), COOH, COO-R', $CONH_2$, CONH-R', CON-(R')(R''), SO_3H, SO_2NH_2, CF_3, and CO-R' wherein alkyl, aryl and aralkyl groups may be further substituted with one or more groups selected from halogeno, NO_2, CN, OH, O-methyl, NH_2, COOH, $CONH_2$ and CF_3;

R^4, R^5 and R^8 are each independently selected from H, halogeno, nitro, amino, aminoalkyl, hydroxy, alkoxy, carbamoyl, sulfamyl, N(R')(R''), C_{1-4} alkyl and substituted C_{1-4} alkyl;

R^6 is selected from H, halogeno, nitro, amino, aminoalkyl, hydroxy, alkoxy, carbamoyl, sulfamyl, N(R')(R''), butyl and substituted C_{1-4} alkyl;

R^7 is selected from H, halogeno, nitro, amino, aminoalkyl, hydroxy, carbamoyl, sulfamyl, N(R')(R'') C_{2-4} alkyl and substituted C_{1-4} alkyl;

wherein R' R'' and R''' are each independently alkyl groups that may be the same or different and n is 0 or 1, wherein at least two or three of R^1, R^2, and R^9 are not hydrogen,;

~~with the proviso that when R^1, R^2, and R^3 are H, and X^2 is CH, the phenyl group is not~~

~~unsubstituted phenyl,~~

~~3-methyl phenyl,~~

~~3-(1,1,2,2-tetrafluoroethoxy) phenyl, or~~

~~3,4,5-trimethoxy phenyl,~~

or a pharmaceutically acceptable salt thereof.

41. (Previously Presented) A pharmaceutical composition comprising a compound of claim 39 or 40 or a pharmaceutically acceptable salt thereof together with a pharmaceutically acceptable excipient.

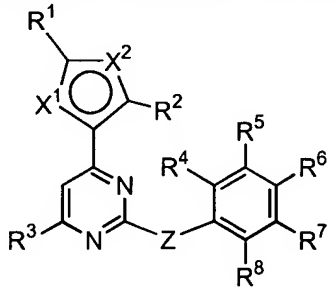
42. (Previously Presented) A method of treating a subject for a CDK dependent proliferative disorder, comprising administering to a subject a compound of claim 39 or 40 or a pharmaceutically acceptable salt thereof, such that said CDK dependent proliferative disorder in said subject is treated.

43. (Previously Presented) The method of claim 42, wherein the proliferative disorder is cancer or leukaemia.

44. (Previously Presented) The method of claim 42, wherein said compound is administered in an amount sufficient to inhibit at least one CDK enzyme.

45. (Previously Presented) The method of claim 44, wherein the CDK enzyme is CDK2 and/or CDK4.

46. (Currently Amended) A method of treating a subject for cancer or leukemia, comprising administering to a subject a compound of general formula 1 or a pharmaceutically acceptable salt thereof, such that said cancer or leukemia in said subject is treated, wherein said compound of general formula 1 is.



I

wherein:

one of X^1 and X^2 is NR^{10} and the other of X^1 and X^2 is CR^9;

Z is NH, NHCO, $NHSO_2$, $NHCH_2$, CH_2, CH_2CH_2, or CH=CH;

R^1, R^2, R^3 R^9 and R^{10} are independently H, alkyl, aryl, aralkyl, heterocycle, halogeno, NO_2, CN, OH, alkoxy, aryloxy, (R''')nNH$_2$, (R''')nNH-R', (R''')nN-(R')(R''), NH-aryl, N-(aryl)$_2$, COOH, COO-R', COO-aryl, $CONH_2$, CONH-R', CON-(R')(R''), CONH-aryl, CON-(aryl)$_2$, SO_3H, SO_2NH_2, CF_3, CO-R', or CO-aryl, wherein alkyl, aryl, aralkyl and heterocycle groups may be further substituted with one or more groups selected from halogeno, NO_2, CN, OH, O-methyl, NH_2, COOH, $CONH_2$ and CF_3;

R^4, R^5, R^6, R^7, and R^8 are independently from each other H, substituted or unsubstituted lower alkyl, halogeno, NO_2, CN, OH, substituted or unsubstituted alkoxy, NH_2, NH-R', N-(R')(R''), COOH, COO-R', $CONH_2$, CONH-R', CON-(R')(R''), SO_3H, SO_2NH_2, or CF_3;

wherein R' R'' and R''' are each independently alkyl groups that may be the same or different and n is 0 or 1, wherein at least two or three of R^1, R^2, and R^9 are not hydrogen; ~~with the proviso that when R^1 and R^2 are H, X^1 is NH, X^2 is CH, and R^3 is H, the phenyl group is not~~ —

~~unsubstituted phenyl,~~
~~4-ethyl phenyl,~~
~~3-methyl phenyl,~~
~~3-(1,1,2,2-tetrafluoroethoxy) phenyl,~~
~~3,4,5-trimethoxy phenyl,~~

or a pharmaceutically acceptable salts thereof.

47. (Previously Presented) The method of claim 46, wherein said compound is administered in an amount sufficient to inhibit at least one CDK enzyme.

48. (Previously Presented) The method of claim 47, wherein the CDK enzyme is CDK2 and/or CDK4.